



White Paper

The Pitfalls of Consumer-Grade Tablets



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Four Fleets Discover Why Built-For-Trucking Telematics Is Essential

Trucking fleets are in the business of moving freight. Too often though, they find themselves facing unhappy drivers and unplanned downtime caused by technology limitations and unreliable hardware not designed to withstand the rigors of the freight business.

Fleets that equip drivers with commonly available consumer-grade tablets may initially believe the low cost of these devices will save money. The reality, however, is far different, as fleets are left relying on multiple technology providers and hoping the components from different sources work seamlessly together.



Knowing the pitfalls

Fleets need to take great care in selecting a tablet that can get the job done right. They need an open ecosystem that can support the necessary trucking-specific, third-party apps. They also want to avoid a tablet tethered to cradles inside the truck, or drivers will not be able to use them to take pictures, scan documents or obtain electronic signatures. Most of all, carriers must choose a device that avoids the pitfalls of multi-provider solutions to keep operations smooth.

Fleet managers can find themselves seeking customer service from a cellular provider one moment and a tablet manufacturer the next, all while coaching technicians to become IT experts. At the same time, drivers can be burdened with troubleshooting technical problems, rather than having their wheels turning out on the highways as intended.

Such service disruptions can force drivers to use paper logs, lose contact with dispatch or be unable to properly access driving directions and navigation. All of this can cause frustration and even a form of distraction impacting road safety, leaving a fleet far more vulnerable to a nuclear verdict.

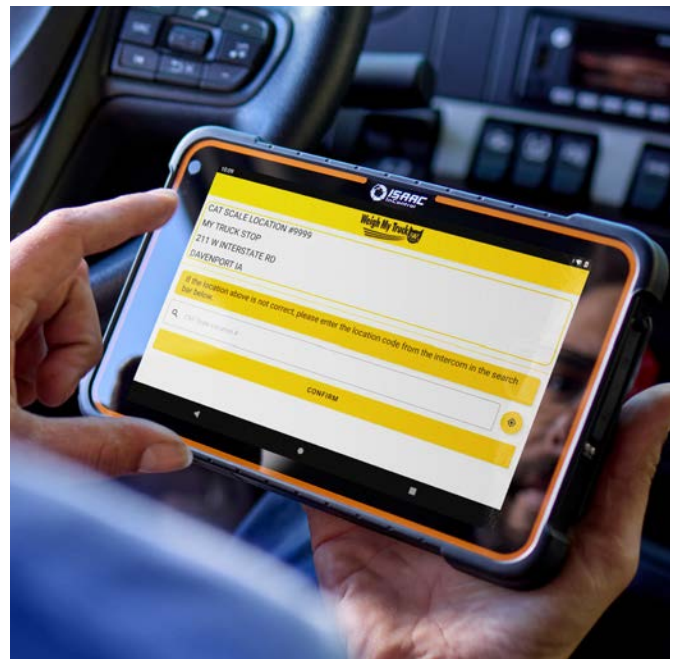
“We went to a mobile platform option and bought our own tablets, which was a nightmare to manage.”

Elements of success

If this sounds familiar, you may already know how critical it is for your fleet to find a single technology partner offering a comprehensive solution. One that can adapt to your changing needs over time and provide the flexibility needed for a fleet-focused communication solution.

That is what fleets discover when they partner with ISAAC. They get a driver-centric solution that offers both a rugged, built-for-trucking device and an open platform that gives fleets the control they need to customize the in-cab experience.

ISAAC InControl tablet



Four Fleets, Similar Experiences

Today, Heartland Express, Peters Brothers Trucking, Veltri Logistics and Tranco Logistics are among the hundreds that partner with ISAAC to power their businesses. Each one experienced similar software limitations and hardware disappointments with previous providers.

The need to innovate

Heartland Express, a leading truckload carrier based in North Liberty, Iowa, first got involved in telematics back in the 1990s. Back then, Heartland's drivers and fleet managers used what Director of Operations James Tornblom described as devices with green screen text with clunky, non-intuitive user interfaces. "We were paying for data by the character in those early days."

The early telematics system worked well for Heartland until the middle of the last decade, when the Federal Motor Carrier Safety Administration (FMCSA) moved forward with the electronic logging

device (ELD) mandate. "Seeing where the regulation and transportation industry was going, Heartland investigated an upgrade to its telematics solution that was capable of many other things other than just ELD compliance," Tornblom says.

Heartland concluded that providing a tablet to drivers in the truck cab would be the most effective way to tap into a modern telematics system. "Our imagination ran wild thinking about all the potential tablets had for our operations," Tornblom says. "One particularly attractive aspect was providing training videos remotely to drivers and communicating company updates no matter where they were."



Gaining field experience

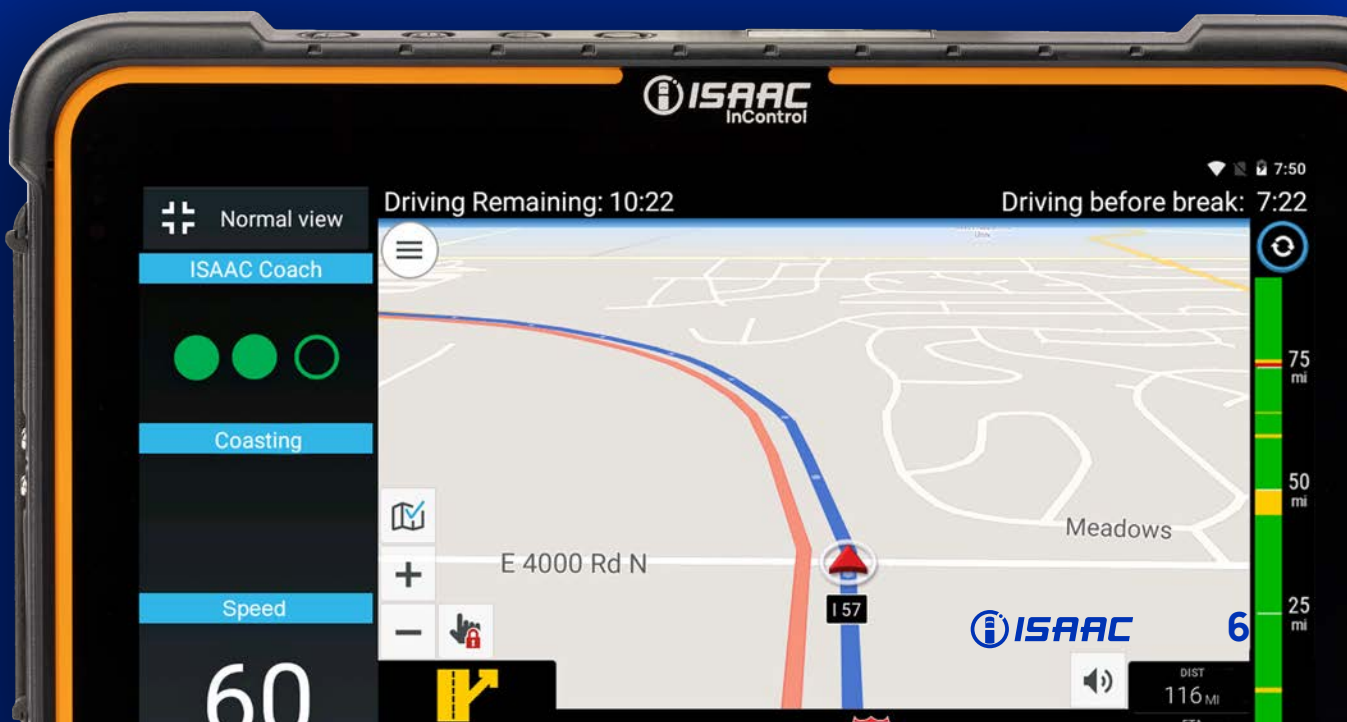
It was at this point that Heartland discovered there was a bewildering array of tablet options to choose from. “Not only that,” Tornblom recalls, “but you have to decide if cellular coverage is the right call. Or do you go with Wi-Fi systems? You have to figure out how that device is going to connect to the internet. Can it do so on its own? Or does it need a hotspot? Can you trust Bluetooth systems? Or is it better to hardwire the system?”

Peters Brothers Trucking, a coast-to-coast refrigerated fleet based in Lenhartsville, Pennsylvania, was having a similar experience. Ann Reifsnyder, Director of Safety, recalls that ahead of the ELD mandate, Peters Brothers initially went with a hard-wired system. However, Peters Brothers felt the provider could not keep up with the changes and made a switch.

“We went to a mobile platform option and bought our own tablets, which was a nightmare to manage,” Reifsnyder says. “The data costs, IT issues and lack of combined support caused us to search for a provider again.”

There were also issues with reliability in the cold weather. “We had our drivers cover the tablets with blankets and jackets to try and keep them warm enough to work in winter. And because the Wi-Fi was so unreliable, we ended up having to purchase a data plan for all of our tablets.”

“Heartland concluded that providing a tablet to drivers in the truck cab would be the most effective way to tap into a modern telematics system.”



Understanding Mobile Device Management

As Heartland Express continued its technology exploration, it realized that mobile device management (MDM) was going to be a priority. “There are a lot of providers out there,” Tornblom says. “And we had to learn all of this. It’s important to know who will provide you with MDM. Is it the fleet itself? Is it the telematics provider? Or do you contract with a third party with a monthly subscription plan?”

When variety becomes a problem

After examining the issue, Heartland went with consumer-grade tablets running the Android 5 operating system. But about six weeks in, the Android 6 operating system was released. And a year later, Android 7 came out.

Heartland was suddenly managing two different tablet models and three different operating systems. Each style of tablet had different sizes and dimensions, and the charging pins and charging ports were also different. That meant Heartland had to carry two different types of cradles and two different tablet models for when there were device problems. The MDM effort to manage and access all the tablets was now split across two fully separate portals.

Almost immediately, there were issues with the Android tablets. The lithium-ion batteries did not like staying on chargers all the time. And hot internal cabs in summer months would cause the tablets to swell and crack. Worse yet, the pogo-pin style charging ports and charging cradle could not withstand the harmonic vibrations generated by a tractor-trailer rolling down the highway and often broke.

“We didn’t know any of these things,” Tornblom says. “It wasn’t long before we were losing 20 tablets a week. That’s 80 tablets a month we were having to replace.”



ISAAC InControl tablet dock with external speaker



Fighting distraction and disruptions

The unexpected challenges came in other forms as well.

“The consumer tablets came preloaded with apps that all had to be blocked to ensure drivers stayed focused on the road while driving. That’s a lot easier said than done,” Tornblom notes. “And configuring the consumer-grade tablets so they were controlled in a professional way that only displayed what fleet managers wanted them to was also easier said than done.”

Problems with devices meant Heartland was losing valuable time rerouting drivers to terminals to replace communications equipment. “It was very expensive to maintain that system,” Tornblom says.

This is a familiar story to Lou Giardelli, Director of information technology at Veltri Inc. based in Trevoze, Pennsylvania. The fleet is partially contracted to carry mail for the U.S. Postal Service and also provides truckload services in the New York and Pennsylvania metro areas. Giardelli recalls that Veltri was experiencing a high number of devices failing and too many trips getting unexpectedly dropped from the system from its previous technology provider.

In addition, Giardelli said Veltri had to wire the tablets inside the truck because drivers would sometimes move tablets between vehicles by themselves.

A Solution That Flat-Out Works

Reliable and fully integrated

Several years ago, Heartland decided it needed to refresh its in-cab telematics solution and decided to investigate a more robust and driver-centric solution. After considering several options, Heartland decided to partner with ISAAC and its fully integrated, exclusively built-for-trucking solution.

“ISAAC has done extremely well with our mobile device management,” Tornblom says. “And that’s been a welcome change to us as a carrier as it allows us to focus more on the operations of our business without the need to be experts in operating and managing the telematics equipment.”

“The fact the ISAAC solution is completely integrated cannot be overstated,” Tornblom stresses. “It’s extremely important to us that we have complete control of the tablet. We don’t have drivers calling in saying they can’t access the tablet, or that it’s rebooting, or they’re locked out anymore,” Tornblom adds. “We’ve finally got a solution that flat-out works.”


“ISAAC has done extremely well with our mobile device management.”

Manage loads, not devices

Also fed up with data costs, IT issues and a lack of product support, Peters Brothers went on to explore other telematics platforms before its contract with its telematics provider was up. After partnering with ISAAC, Peters Brothers enjoyed an immediate change in how, when and where its drivers worked and managed their logs.

“The ISAAC tablet mobile platform is optimal for our needs,” Reifsnnyder says. “We can take it on the go and we aren’t responsible for a separate program or contract for the tablet.”





“I don’t think we’ve had a single ISAAC device fail.”

A smooth transition

Likewise, after talking with several different vendors, Giardelli selected the ISAAC solution as Veltri’s new way forward. “I’m a big process guy,” he says. “And our ISAAC representative talked me through everything about the ISAAC solution and its driver-focused tablets. So that was important to me.”

The transition to ISAAC tablets went smoothly, Giardelli adds. The entire fleet was switched over to ISAAC in a very short period. “We transitioned in phases,” he recalls. “After core training utilizing ISAAC-supplied videos, we started with a small group to get them used to the new equipment and elicit feedback. We started with five drivers the first week and if there was nothing impactful to their work and the operation, we continued. Each week, we would transition another 10 or more, depending on how things were going or, until we ran out of time. Overall, the process was extremely smooth.”

Today, Giardelli says the ISAAC device is portable enough to easily come out of the cab if a driver needs to take photos during an inspection. Yet it’s also tough enough to deal with the everyday rigors of trucking. “I don’t think we’ve had a single ISAAC device fail,” he says. “Our cellular coverage issues have disappeared, and our drivers are now all on the same network, using the same system. They’re now able to do everything via workflow as our operations team plan so, it’s been the perfect solution for us.”

Easy installation

Tranco Logistics, a dry van carrier headquartered in Chattanooga, Tennessee, recently faced the challenge of having to upgrade an aging telematics system due to changes in cellular networking technology. Byron Trantham, co-owner of Tranco Logistics, says that by going with ISAAC, Tranco discovered they could get an ELD and telematics system that addressed multiple challenges and offered an easier-to-use driver interface.

Installing the ISAAC hardware is also straightforward. “We have our own shop, so once our crew had seen the ISAAC technicians install some of the units and understood what went where, it was routine,” Trantham says. “Our technicians reported that getting the units up and running was less cumbersome than installing the hardware for our previous telematics provider.”



One Partner: The Perfect Solution

Driver-friendly

A key benefit with the ISAAC solution is the ability for fleet managers to remotely take control of the tablet to assist when a driver is having an issue. Other tablets rely on third-party apps to handle this critical interaction. With ISAAC, a fleet manager can access the tablet with two clicks on the web portal.

"Now, we can see what the driver is seeing and troubleshoot them to a resolution," Heartland's

Tornblom says. "It's a lot easier for us to troubleshoot what's going on. We can remote in and there's no website to go to. No keystrokes to put in."

Tranco's Tranthan adds, "It's obvious that the product engineers at ISAAC talked to drivers when they were designing their product, and they paid attention to what the drivers told them. ISAAC's ease of use meant that we were able to cut the ELD training from 90 minutes to around 30 minutes."



Operations-focused

There is also just one single communication portal with ISAAC. There is never any confusion about different systems or passwords. With ISAAC, you go to the portal, find the truck on the map, click on it and remote in.

“ISAAC is better than any other system I’ve seen,” Tornblom says. “We can quickly work through any issues and get our drivers back on the road without them feeling frustrated that they can’t run the device. They’re not frustrated or scared that they’re not doing something right.”

Tornblom can say every tablet on every Heartland truck is working. “It’s really out of sight, out of mind for us now. That’s how life should be. And we’ve learned to take the ISAAC solution for granted very quickly. When you’re not having issues, life is much easier.”



“We needed a partner that owns the technology wholly, and this is what ISAAC provides.”

The power of one

Looking back on their telematics journey, all of these fleet executives agree that having a single, reliable technology provider has been a key to success.

“We needed a partner that owns the technology wholly, and this is what ISAAC provides,” Tornblom says. “Having many technology partners lead to many extra employees doing extra jobs.” That list included procuring the devices, stocking the devices, managing data plans, managing the physical devices and providing telematics support to drivers.

“Multiple partners have to be managed and dealt with,” Tornblom says. “And that causes your fleet head count to go up, because you have to hire additional people to manage all the varying situations that arise. ISAAC shoulders the entire burden of managing, maintaining and operating the telematics system. The focus of the Heartland team is back to a 100% focus on moving freight.”

“We learned a lot from our experiences dealing with telematics over the past 25 years,” Tornblom adds. “And we know that this is how a telematics system and a technology partnership is supposed to work.”



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